

Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Herbert Campbell

GENERAL INFORMATION:

Name:	Union Light, Heat & Power Company - East Bend Generating Station
Address:	6293 Beaver Road, Union, Kentucky 41091-0142
Date application received:	June 22, 2004
SIC/Source description:	4911; Electric Power Generating Facility
Source ID #:	21-015-00029
Source A.I. #:	176
Activity #:	APE20040006
Permit number:	V-06-038

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input checked="" type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input checked="" type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

☒ Acid rain source
☐ Source subject to 112(r)
☐ Source applied for federally enforceable emissions cap
☐ Source provided terms for alternative operating scenarios
☐ Source subject to a MACT standard
☐ Source requested case-by-case 112(g) or (j) determination
☐ Application proposes new control technology
☒ Certified by responsible official
☒ Diagrams or drawings include
☐ Pollution Prevention Measures
☐ Area is non-attainment (list pollutants):
☒ Compliance Assurance Monitoring (CAM) Plan included in renewal application.

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)**	Potential (tpy)
PM/PM ₁₀	605/360	4719/3286
SO ₂	11546	33183
NO _x	6187	13832
CO	465	616
VOC	56	79
LEAD	.52	.52
HCl	166	354
HF	20	33

** Actual based on 2004 EIS reported values.

SOURCE PROCESS DESCRIPTION:

An application for a renewal of the Title V Permit, V-97-015R2, for the Union Light, Heat & Power Company/East Bend Generating Station was received on June 22, 2004. A nitrogen oxides (NO_x) budget permit application was received on June 16, 2003. The new Title V permit will include a renewal of the Phase II Acid Rain Permit and the NO_x Budget Permit.

The source is an electric power generating station consisting of one (1) pulverized coal-fired boiler. The boiler COMB-01 (E. Unit 02) has an input capacity of 6313 mmBtu/hr. The unit is wall-fired, equipped with an electrostatic precipitator (ESP), flue gas desulfurization (FGD) unit, low nitrogen oxide burners and an Selective Catalytic Reduction (SCR) unit. In addition, ash, coal and limestone related equipment as well as a synfuel operation for the binding of coal fines to form coal pellets are utilized.

The facility is classified as a Title V major source of air pollution based on the potential to emit more than 100 tons per year (tpy) of particulate matter less than 10 microns (PM₁₀), carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂).